

# ALAMEDA COUNTY CONGESTION MANAGEMENT AGENCY

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## TRI-VALLEY TRIANGLE STUDY POLICY ADVISORY COMMITTEE

## MEETING NOTICE (Note change of date and different start time)

Friday, September 9, 2005 2:30 PM

City of Dublin Regional Meeting Room 100 Civic Plaza Dublin, CA 94568 Members:

Mayor Janet Lockhart City of Dublin Councilmember Kasie Hildenbrand City of Dublin Mayor Marshall Kamena City of Livermore Councilmember Marjorie Leider City of Livermore Mayor Jennifer Hosterman City of Pleasanton Councilmember Cindy McGovern City of Pleasanton Supervisor Scott Haggerty Alameda County Supervisor Nate Miley Alameda County

Agenda

### 1.0 INTRODUCTIONS

## 2.0 PUBLIC COMMENT

Members of the public may address the Committee during "Public Comment" on any item <u>not</u> on the agenda. Public comment on an agenda item will be heard when that item is before the Committee. Anyone wishing to comment should make their desire known to the Chair.

### 3.0 MINUTES OF TAC MEETINGS

**INFORMATION** 

The Minutes of the TAC meetings are attached for your information.

### **4.0 MINUTES OF JUNE 3, 2005\***

ACTION

The Committee is requested to review and approve the Minutes of June 3, 2005.

## **5.0 PURPOSE OF STUDY\***

ACTION

This item was re-scheduled from June 3, 2005. The Technical Advisory Committee recommends approval of the revised study purpose (attached). The text has been modified to clarify the intent of the analysis and to incorporate the comments made by the Policy Advisory Committee at the May meeting.

## 6.0 DRAFT PACKAGES OF ALTERNATIVES

ACTION

The TAC recommends that the Policy Advisory Committee approve the alternative packages as attached. The TAC reviewed data from "sensitivity" model runs to develop the packages considering connectivity, measures of effectiveness at a gross level, and a rough order of costs. Once approved by the Committee, the alternatives will be modeled, evaluated using the approved quantitative and qualitative measures. It is assumed that some of the measures may be recombined to streamline the results as further analysis is performed on the alternatives.

7.0 SCHEDULE ACTION

The Committee is requested to approve the revised schedule as attached. The schedule for completion of the study has been delayed by two months. It took additional time to validate the two models to an acceptable level and to develop the preliminary packages. It is estimated that the study will be completed in April, 2006.

### 8.0 OTHER BUSINESS

## 9.0 ADJOURNMENT/NEXT MEETING FRIDAY, NOVEMBER 4, 2005

The original schedule called for a two month period once the preliminary packages were approved by the PAC to provide sufficient time to evaluate the packages. Originally, this task was to have been completed in July and August. The modeling will now take place in September and October. Given that there will be no new information available to the PAC until October, it is recommended that the October meeting be canceled.

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September 9, 2005 Agenda Item 3.0

645176/224.01

Date: July 26, 2005

Project: Tri-Valley Triangle Study

Subject: Triangle Technical Advisory Committee Meeting Minutes

To: All who attended meeting, see attached sign-in sheet

From: Kai Chan Parsons

Enclosed are the minutes for the Triangle TAC meeting held on July 26, 2005. If you have any questions, comments, or changes to the minutes, please contact Kai Chan or Jean Hart before the next TAC meeting on August 18, 2005.

645176/224.01

PROJECT: Tri-Valley Triangle Study

**SUBJECT:** Triangle TAC Meeting

**DATE:** July 26, 2005; 1:30 PM

**LOCATION:** Dublin City Hall, Regional Room

100 Civic Plaza Dublin CA 94568

ATTENDEES: See attached sign-in sheet, Agenda, and attachments

MINUTES BY: Parsons

The purpose of the meeting was to discuss the CORSIM operations model; the travel demand model sensitivity results, and to assemble the packages of alternatives to recommend to the PAC.

The following is a summary of the meeting. Action items are shown in **bold** and critical path items are in **bold and italicized**. Action items subsequently completed are in *italics*.

DISCUSSION	ACTION
Welcome and Introductions: Ben Strumwasser of Circle Point started off the meeting and everyone introduced themselves to the group. All three Tri-Valley cities, Caltrans, Alameda County representatives were present.	
Draft Meeting Minutes for July 14, 2005 Meeting: The Action Items from the July 14, 2005 were completed on schedule. The meeting minutes was accepted without comment by those present at the meeting.	
Operations Model: Ravi and Kai presented the CORSIM simulation for the existing year traffic operations in the I-580 corridor, validated to 2001-2002 counts. The focus of the presentation was on the westbound direction traffic operations. The eastbound direction was presented at the July 14, 2004, and the team concurred with the results. The simulation model validation was within the standard tolerance for modeling and reflected the general traffic patterns along the I-580 Corridor. The congestion areas along the I-580 corridor were shown in the simulation and presented in tables and graphic handouts. The TAC agreed that the model was satisfactory and the team should proceed with the development of the 2030 base year condition that will be used to evaluate various improvement packages.	Ravi will upload the revised CORSIM simulation in the FTP site, send out notice of its availability, and make copies in CD format for distribution to those team members wanting a copy.
The following are some comments/questions asked during the operations model discussion:	сору.
1) In the AM, traffic sometime backs up from Vasco to Greenville. This was reflected in the simulation.	Ruben Izon and Dave Seriani
2) Are the truck scales reflected in the simulation? Yes, the speed input in the CORSIM model for the section of I-580 where the truck scales are located were adjusted to simulate the affects of the truck scales.	requested a copy of the CORSIM simulation in CD format. Ravi to
3) Do the Vasco I/C on-ramp volumes match the 2001-02 counts? Yes,	send CD. Target for

however, the general feeling from the City of Livermore was that there is more traffic using the Vasco I/C today. The team will keep this in mind during the study.

- week of August 1.
- 4) Do the traffic patterns in the I-580 corridor generally match patterns today? Yes, the general traffic patterns were successfully simulated in the model. The 2030 Base years patterns are expected to change due to the influence of many factors such as land use, demand volumes, network changes; freeway operations, timing of various Tri-valley transportation improvements, trip table; transit; etc...
- 5) Are the ramp intersections at Hacienda and Dougherty included in the revised simulation? Yes, the CORSIM model was adjusted to account for the intersections and the signal traffic was provided by Jeff.
- 6) The simulation at the July 14 meeting only looked at one hour during the peak period, starting from 7:00 am, in the westbound direction. Was the revised simulation adjusted for a two-hour period? Yes, the simulation is now for two hours in both direction of I-580.
- 7) The proposed HOV direct connector could impact the Stoneridge I/C. There were general agreement to this comment; however, the Triangle Study is not meant to be a detailed design level traffic operations analysis. This level of analysis would typically be done later if the HOV direct connector becomes a programmed and funded project for implementation.

There were questions from Mahendra about the level of queues in the simulation model at the Vasco Road EB off ramp and on ramp in the PM. In showing the simulation, it was clear that there was queuing on the EB off ramp but not on the on-ramp. Ravi said that the on ramp volumes were calibrated to the actual volumes collected 2001 and 2002, and the ramp was not at capacity; thus the queuing did not show for that particular time slice.

In reviewing I-580 near Hacienda, there were comments that the speed and density, in the simulation model, appeared to be better than expected. Part of this is probably due to the model being calibrated to available traffic counts collected in 2001 and 2002, rather than existing demand or 2005 counts. Readjusting the model would be a considerable effort. The model is also showing average speed and density rather than instantaneous speed and density, which can give a difference in perception, but this averaging is a model approximation and does not affect the accuracy of the travel time and delay results. There was general agreement that the analysis could go forward despite the appearance problems. The future base case that would be used to do the comparisons of the project improvement packages would be based on demand and is expected to show more queuing.

The TAC would like to see the same level of detail on the AM case: added intersection detail and two hour simulation with the actual hours of 7 AM and 8 AM used to feed the simulation. Rubin Izon, who was not on the previous emails for the ftp site notice and data table, would like these sent to him.

The TAC would also like the future videos of the simulation sent by CD as it was felt that this would be easier for some users instead of just being on the ftp site because of technical or time requirements to access the ftp site. Parsons will revise the AM simulation and show it on the 26<sup>th</sup> for confirmation with the TAC.

Sensitivity Results: Kym presented the summary of the sensitivity results.

Kym/Madhav to

The following are the comments/questions from the discussion. Please refer to the 11X17 handout.

- 1) For sensitivity run #3, why did the VHT, VHD, PHT increase with the addition of a mixed flow direct connector? The VHT reduced in the local jurisdiction but the VMT increased for the freeway. One reason may be that some of the trips were diverted from the local network to an already congested freeway due to the mixed flow connector. This adds to the congestion on the freeway.
- The coding for the Isabel I/C needs to be revised. The revision is expected to result in reduced trips in the local network in Livermore, as more vehicles would stay on Rte 84 to the Isabel I/C and then to I-580.
- 3) The ramps at Greenville and Portola needs to be removed to reflect the future condition. Kym agreed to revise.
- 4) Since the new SOV connectors are expected to be over 1500 feet long, the direct connectors should be assumed to be at least two lanes in width to met Caltrans design standards.
- 5) For HOV director connectors, enough cross section width to accommodate two lanes is preferred, and construction of one structure for both directions could be more cost effective than having two separate direct connectors. For the purpose of the travel demand forecast study – the HOV connector should be coded as one lane, the actual cross section width of the connector could be wider to provide for future modification. For a SOV direct connector, we should code the model for a two lane facility.
- 6) Kym would like to confirm at the next TAC meeting the TAC's recommendation regarding the total ramp metering rate assumption for the various on-ramps along the I-580 and I-680 corridor, for the Year 2030 base case. Currently, her understanding is that the assumption for the year 2030 base case for all ramps would be a total PM peak hour metering rate of 600 vehicles per ramp. Isabel was to be 800 vehicles per ramp. Because each on-ramp will assume to have an HOV bypass lane, Kym wanted clarification on whether the volume entering the freeway from the on-ramp will be higher than 600 (800) vphpl or whether the HOV bypass lane is part of the total ramp metering rate. Kevin Chen confirmed that for the I-580 HOV Lane corridor project, the current assumption is that all the ramp for Year 2030 will be operating at a metering rate of 600 vphpl (per hour per lane, and the I-680 NB to I-580 EB is assumed to be at a maximum 900 vphpl.
- 7) Validation comments are pending from the TAC. Target date to provide comments to Kym is July 29<sup>th</sup>.

It would be helpful if the TAC would provide comments by email regarding the sensitivity runs so that the Consultant team could compile, analyze and provide responses at the next meeting. The sensitivity runs only serve to help the team decide on the improvement packages and allows the team to look at the traffic patterns in the network.

It would be more cost effective to spend the team's time and effort on fine

revise coding for the Isabel I/C and redo the sensitivity runs for the TAC's review. Target for July 29.

Kym/Madhav to review Altamont count info provided by Ruben Izon.

Kym to review comments and adjust the model for the Year 2030 base case runs.

The TAC to provide comments regarding the ramp metering rates. Target for August 1st.

Kym to adjust Livermore network by next meeting.

The TAC to provide Kym with validation comments by July 29<sup>th</sup>.

tuning the 2030 Base Case model, as this will be the basis for comparison of the various improvement packages.

Preliminary Packaging of Improvement Projects: After some good discussion among the TAC members, the TAC suggested the preliminary improvement packages described below for further consideration. The TAC suggested that having some rough order of magnitude construction cost estimates would be helpful in deciding on the packaging of the improvement projects. Parsons was requested to provide rough construction cost estimate for the TAC's info in approximately 2-weeks and provide the info to the TAC.

TAC to review the preliminary improvement package described below, exam the traffic data, and work toward completing the recommendations of the improvement packages at the August 18 TAC meeting.

- 1) WB 580 HOV, Greenville to Isabel; and Widen Route 84
- 2) WB 580 HOV, Greenville to direct connector; and WB 580 to SB 680 HOV direct connector (connecting to existing I-680).
- 3) WB 580 HOV, Greenville to direct connector; WB 580 to SB 680 HOV direct connector; and SB 680 HOV lane, from Alcosta to Rte 84.
- 4) Truck climbing lane, from Truck scale to North Flynn Road.
- 5) Widen 84 and provide an additional mixed flow lane from Isabel to Vasco Road (in addition to the eastbound I-580 HOV lane that is in the Year 2030 Base Case).
- 6) NB 680 HOV lane, from Rte 237 to the Alcosta; NB 680 to EB HOV direct connector; and HOV lane from director connector to the eastbound I-580 HOV lane that is in the Year 2030 Base Case.

For all alternatives with the direct connector, the direct connector would be assumed to be two lanes – one mixed flow and one HOV.

Next Steps/Next Meeting – August 18, 9:30 pm, Location: Dublin City Hall.

The meeting will briefly review comments on the sensitivity analyses, discuss the rough cost estimates, and finalize the alternative package recommendations for the September 9, 2005 PAC meeting.

Parsons to provide rough order of magnitude construction cost for the various improvement packages one week before the next TAC meeting.

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Date: July 14, 2005 645176/224.01

Project: Tri-Valley Triangle Study

Subject: Triangle Technical Advisory Committee Meeting Minutes

To: All who attended meeting, see attached sign-in sheet

From: Gui Shearin Parsons

Enclosed are the minutes for the Triangle TAC meeting held on July 14, 2005. If you have any questions, comments, or changes to the minutes, please contact Kai Chan or Jean Hart before the next TAC meeting on July 26, 2005.



645176/224.01

PROJECT:

Tri-Valley Triangle Study

SUBJECT:

Triangle TAC Meeting

DATE:

July 14, 2005; 8:30 AM

LOCATION:

Dublin City Hall, Regional Room

100 Civic Plaza Dublin CA 94568

ATTENDEES:

See attached sign-in sheet, Agenda, and attachments

MINUTES BY:

Parsons

The purpose of the meeting was to discuss the travel demand model sensitivity results, the current status of the operations model, and assemble packages of alternatives to recommend to the PAC.

The following is a summary of the meeting. Action items are shown in bold and critical path items are in bold and italicized. Action items subsequently completed are in italics.

DISCUSSION	ACTION
<u>Welcome and Introductions</u> : Ben Strumwasser of Circle Point started off the meeting and everyone introduced themselves to the group.	
Minutes of May 17, 2005 Meeting and June 16, 2005: The May minutes were accepted without comment by the City of Livermore. The June minutes were accepted by those present (check)Yes however Pleasanton reps were not present to approve.	
Travel Demand Modeling: Kym Sterner of Dowling presented the results of the calibration, which she said exceeded the FHWA guidelines that were agreed upon as targets. Rubin Izon of Alameda County asked about Altamont Pass; Kym said that she is modeling it and tracking diversion but did not have counts for validation. Rubin will provide and they will be included in the final validation runs. Mahendra Patel of Livermore asked for a pdf that he could plot on 11x17; Kym will send the TAC files for plotting on 11x17 as well as a full area one that uses very small fonts so that all the data is provided, including ramps and shorter links, and is better for zooming into and printing selected areas. Mahendra requested an extension on the review time so that Bob Vinn who is on vacation until the 26 <sup>th</sup> can review. Mahendra asked about a select link analysis for Vasco Road at the County line that would let him see what percentage is going to/from Santa Clara County. Kym said that the I-680 gateway select links would provide this information; Mahendra indicated that this would be sufficient. Validation and select link plots will be distributed by Dowling Associates by COB July 15th.	Kym to email pdfs of the validation by July 15. All validation comments are due to Jean Hart on or before the 29 <sup>th</sup> .
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Operations Model: Gui Shearin asked if there are additional comments on the simulations or if the existing comments had been resolved. There were questions from Mahendra about the level of queues in the simulation model at the Vasco Road EB off ramp and on ramp in the PM. In showing the simulation, it was clear that there was queuing on the EB off ramp but not on the on-ramp. Ravi said that the on ramp volumes were calibrated to the actual volumes collected 2001 and 2002, and the ramp was not at capacity; thus the queuing did not show for that particular time slice.

In reviewing I-580 near Hacienda, there were comments that the speed and density, in the simulation model, appeared to be better than expected. Part of this is probably due to the model being calibrated to available traffic counts collected in 2001 and 2002, rather than existing demand or 2005 counts. Readjusting the model would be a considerable effort. The model is also showing average speed and density rather than instantaneous speed and density, which can give a difference in perception, but this averaging is a model approximation and does not affect the accuracy of the travel time and delay results. There was general agreement that the analysis could go forward despite the appearance problems. The future base case that would be used to do the comparisons of the project improvement packages would be based on demand and is expected to show more queuing.

The TAC would like to see the same level of detail on the AM case: added intersection detail and two hour simulation with the actual hours of 7 AM and 8 AM used to feed the simulation. Rubin Izon, who was not on the previous emails for the ftp site notice and data table, would like these sent to him.

The TAC would also like the future videos of the simulation sent by CD as it was felt that this would be easier for some users instead of just being on the ftp site because of technical or time requirements to access the ftp site. Parsons will revise the AM simulation and show it on the 26<sup>th</sup> for confirmation with the TAC.

Sensitivity Results: Kym presented the sensitivity results and indicated that comments on the model responsiveness are a part of the validation process. The measures of effectiveness indicate there is some "noise" in the model. Kym will try to reduce this noise by increasing the number of iterations in the model runs. Also, the congested volumes statistics have some factors in them which adjust for differing levels of congestion. These are causing some strange results when comparing MOEs (specifically VMT, VHD, PHT and THT) between alternatives. Kym will review and modify these calculations so that the assumptions are constant between alternatives. This would also address the issue raised by Ray Kuzbari about why truck hour statistics went up for Dublin with the WB HOV lane. Another issue was that the result of adding a NB 680 to EB 580 HOV direct connector had the result of increasing congestion on I-580 and adding traffic to Stanley. The TAC surmised that the gap between the connector and the HOV lane is probably a factor in this result.

Ray Kuzbari commented that the increase in traffic through Dublin.

Parsons will revise
AM simulation to be
comparable to the PM
and show it again on
the 26<sup>th</sup>.

Parsons will send the simulation data file and FTP notice to Ruben Izon at the County.

Rubin Izon to provide Dowling with AM and PM peak hour counts for the Altamont Pass.

Kym will send a revised sensitivity table by July 15. Comments are due to Jean Hart to give to Kym Sterner by Wednesday, July 20.

Michele Bellows to check on the Route 84 lane assumptions and I-580/Isabel Interchange configuration for the future base case and send information to Jean.

Emails for Dublin

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with both the HOV and mixed flow direct connectors from WB 580 to SB 680 were counter-intuitive. Kym said that some of the result was traffic flipping (noise) in the assignments that Dowling would investigate. The fact that there was no SB HOV lane on 680 is also a factor that makes these improvements less effective.

Kym asked to confirm what the base case on Route 84 should be; it is clear that it is 2 lanes through Pigeon Pass, but the question is whether the future base case is 4 lanes from Stanley up to I-580 or 6 lanes. Also the configuration and number of lanes at the Isabel interchange is needed. The current assumption of 1 lane ramps does not allow for full responsiveness of the model to improvements to SR 84. Sensitivity analysis run #6 which improved Route 84 to four lanes through Pigeon Pass and six lanes to I-680 showed diversion of traffic through Livermore because of the lack of capacity of the Isabel Interchange. Michele to check on the future base assumptions for Route 84 and the associated Isabel Interchange and get back to Jean.

For future presentations, Kym will bring a large plot which can be drawn on.

Melissa Morton, Public Works Director for the City of Dublin, will be standing in for Ray at the next meeting because he will be on vacation. Copy <a href="Melissa.morton@ci.dublin.ca.us">Melissa.morton@ci.dublin.ca.us</a> for the mailings prior to the next TAC meeting.

Next Steps/Next Meeting – July 26, 1:30 pm, Location: Dublin City

The meeting will briefly discuss AM operations, review comments on the sensitivity analyses, and then concentrate on developing alternative packages for the PAC to review in August.

prior to the next TAC meeting should be sent to Melissa Morton, who will sit in for Ray while he is on vacation.

Dowling to bring to the next Trend Meeting the large plot showing the study network (added after the meeting)

CMA or Circle Point to call the participants prior to the next TAC as a reminder.

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## PARSONS

100 Park Center Plaza, Suite 450 • San Jose, California 95113 (408) 280-6600 • Fax (408) 280-7533

Date: July 5, 2005 645176/224.01

Project: Tri-Valley Triangle Study

Subject: Triangle Technical Advisory Committee Meeting Minutes

To: All who attended meeting, see attached sign-in sheet

From: Gui Shearin Parsons

Enclosed are the minutes for the Triangle TAC meeting held on June 16, 2005. If you have any questions, comments, or changes to the minutes, please contact me before the next TAC meeting on July 14, 2005.



645176/224.01

PROJECT: Tri-

Tri-Valley Triangle Study

SUBJECT:

Triangle TAC Meeting

DATE:

June 16, 2005; 9:30 AM

LOCATION:

Dublin City Hall, Regional Room

100 Civic Plaza Dublin CA 94568

ATTENDEES:

See attached sign-in sheet, Agenda, and attachments

MINUTES BY:

Parsons

The purpose of the meeting was to discuss the study performance measures (including weighting and recommendations to the PAC) and base case definition.

The following is a summary of the meeting. Action items are shown in **bold** and critical path items are in **bold and italicized**. Action items subsequently completed are in *italics*.

DISCUSSION	ACTION
Welcome and Introductions: Ben Strumwasser of Circle Point started off the meeting and everyone introduced themselves to the group.	
Minutes of May 17, 2005 Meeting: The minutes were accepted provisionally unless the City of Livermore has changes.	City of Livermore to review minutes.
Travel Demand Modeling: Kym Sterner of Dowling asked for reaction to the validation assumptions by Tuesday the 21st on the calibration volumes and networks. Jeff Knowles of Pleasanton asked what was being assumed for the I-680 HOV lanes. Jean Hart of ACCMA said that the lanes (between Route 84 and Alcosta Boulevard) should not be in the future base because they were projects to be sequenced.	
Kym said that she was proceeding with validation. Jean Hart explained that the future base was the general plan except for the PAC recommended changes in Pleasanton (removal of Stoneridge Extension and the W. Las Positas Interchange). She said that it would be presented with an "as of" date" on it and a statement that it was for the purposes of the Triangle study. Ray Kuzbari of Dublin said Dublin Boulevard would be six lanes to city limits and four lanes the last 4,000 feet where it would connect with North Canyons Parkway.	

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Ramp metering rates were reported as the following: eastbound rates in the PM are not to exceed 600 vph. Westbound I-580 would not exceed 900 vph in the AM. Isabel Avenue would be metered at 800 vph in the PM. The I-680 connector would be metered at 900 vehicles per hour per lane (vphpl). (The other rates are total hourly volumes for the ramps.) In response to a question on metering of I-680, David Seriani of Caltrans said that meters would be installed, but that use of them would depend on the cities. Effectively there would be no restrictions since the metering would be at demand.

Truck percentage assumptions, provided via email by Dowling Associates, based on Caltrans and survey data are about 12.5 percent on the Altamont Pass and 10.6 percent near Greenville Road for 2003. The commuter survey also indicated just over 10 percent trucks in the morning peak period. Kym noted that evening peak period truck percentages tend to be lower in the San Joaquin Valley and asked if there were any available data to support a different percent in the PM and if the percentages should be the same in the future. Phil Cox of Caltrans said that he could look at the trend in the past to see if it suggests something—he will contact her (action by Tuesday). Jean suggested looking at MTC's freight study, which looked at this corridor and what the future trends might be: it would optimistic for the freight point of view. Ray provided Kym with a copy of relevant pages after the meeting. Jeff was concerned that the percentages stay at 10 percent or above. Kym also asked for truck trips at the quarries—the model version looks

Altamont Pass trip distribution will be based on the Altamont Pass Commuter Survey. This survey indicates that 98 percent of the AM peak-hour trips were work related. Changes in travel patterns at the Altamont Pass will be based on growth rate from the statewide model. Jeff said that the City's data indicated that 19 percent of their employees lived in Pleasanton. Kym said that according to the Census, about 30 percent of Pleasanton residents worked in Pleasanton (about 23 percent of employees). She asked for survey data by Tuesday in support of the Pleasanton numbers. Jean was concerned that any data provided to Kym be scientifically valid and objective.

Lastly, Kym will be validating the model to screenline and hot spot locations as well as specific travel routes based on many of the counts provided in the validation database. If TAC members have specific locations that need to be specifically considered as part of the validation process, e.g., an at-capacity intersection or cut-through route, she needs to know by the 23rd.

Operations Model: In response to the existing I-580 simulation that has been posted on the Parsons' ftp site, Jeff and Ray want to see Vasco, Santa Rita, and Hacienda interchanges addressed in the existing pre-ramp metering condition, Kym indicated that it does not seem warranted to spend a lot of time on calibrating to a condition that does not even exist today. To include these interchanges, Ravi Puttagunta of Parsons needs signal times and turning movements. Jeff will email Santa Rita and Hacienda data to Ravi and Ravi will post the results within a week. Vasco Road data are included in the

Data on truck percents or volumes for freeway, truck volumes for quarries, and percent distribution of the origins of city employees should be sent to Kym Sterner by 6/21/05.

Kym Sterner will distribute screen line locations on 6/20/05.

Comments on screen line and hot spot locations as well as identification of specific routes of concern are due to Kym by 6/23/05.

Jeff Knowles will provide intersection data for the Hacienda and Santa Rita interchanges.

Ravi Puttagunta will provide pre-ramp metering simulations **Deleted:** draft meeting minutes\_triangletac\_06\_16\_05\_rev.d

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validation data set from Dowling.	of I-580.
With respect to which hour to simulate, there was general agreement that simulating two hours and picking the second hour would be acceptable. For the baseline condition on I-580, Ravi will use actual hourly volumes for the two hours, i.e., 4-6 PM and 7-9 AM. Then for the future Ravi will use the peak hour twice, perhaps, or two hours of the four-hour peak period.	
Next Steps/Next Meeting – July 14, 8:30 am, Location: Dublin City Hall.  The next meeting will begin at 8:30 AM to allow for a longer meeting.	All – Review minutes and provide any comments/changes by next meeting.

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September 9, 2005 Agenda Item 4.0

Tri-Valley Triangle Study PROJECT:

SUBJECT: Triangle PAC Meeting

DATE: June 3, 2005; 2:00 PM

LOCATION: Dublin City Hall, Regional Room

100 Civic Plaza Dublin CA 94568

See attached sign-in sheet, Agenda, and attachments ATTENDEES:

MINUTES BY: Parsons

The purpose of the meeting was to approve the study purpose, changes to the roadway network in the future base case definition, and TAC selection of the operations model.

The following is a summary of the meeting. Action items are shown in bold and critical path items are in bold and italicized. Action items subsequently completed are in italics.

DISCUSSION	ACTION
1.0 Introductions: The meeting began with all attendees introducing themselves.	
2.0 Public Comments: There were no public comments.	
3.0 Minutes of May 6, 2005: Mayor Lockhart introduced the motion to approve the minutes of May 6, 2005. The motion was passed unanimously. The general consensus was that the format and level of detail of the minutes was sufficient.	
4.0 Purpose of Study: Since there was no designated committee member from Pleasanton (Mayor or Councilmember) the committee decided to wait until Pleasanton Council member Cindy McGovern got back.	CMA staff to follow up with CMA Board for Committee alternates
This brought up the issue that the committees have not elected alternatives for voting. Many members suggested having one alternative for each jurisdiction so that they could go forward with the proceedings. Jean Hart of ACCMA, said that she with take this issue to the June 23 meeting of the CMA	
5.0 Schedule Update: Jean Hart reported that there were no changes to the current schedule and that we are on track.	
6.0 Travel Forecasting and Operations Models – Future Base Case Scenario: Jean Hart explained that the PAC is requested to re-visit the roadway network to be applied in the travel demand model in order to delete the Stoneridge Drive Extension and the West Las Positas Interchange in the City of Pleasanton.	
Mayor Lockhart informed the PAC that the mayors had previously talked about this issue. They suggested that as long as the PAC gets the information regarding how the deletion of these two	
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elements from the Pleasanton General Plan would affect freeways and neighboring cities, there would not be a need to include these two elements in the roadway network for the current study. The City Manager of Pleasanton, Nelson Fialho, commented that this information will be included in the Pleasanton General Plan. In answer to Councilmember Majorie Leider's question regarding when this would be available, City Manager Fialho responded that the circulation piece of the study, which would describe how Pleasanton will look in terms of the 1996 General Plan, using a General Plan buildout of 27,000 people, would be available in late July. The City of Pleasanton would share this information with the cities of Dublin and Livermore. Matt Sullivan, Councilmember of Pleasanton, added that it would be helpful to understand the effects that the Pleasanton General Plan might have on the region, but from a policy perspective, there would not be any advantages to including the two improvements in the current study.

There was discussion of what would be included in the Pleasanton General Plan. Dublin City Manager Richard Ambrose asked whether the Pleasanton model would include the buildout of Dublin. City Manager Fialho of Pleasanton responded that it would include the 2025 buildout of Dublin.

County Supervisor Scott Haggerty emphasized that he would not vote in favor of the motion to exclude Stoneridge Drive Extension and the West Las Positas Interchange from the study unless the City of Pleasanton would provide the required information regarding how these two elements would affect freeway and neighboring cities and that this information would be incorporated in the current study. The City Manager Fialho commented that the information would be provided for the current Triangle Study, but did not agree that it should be included in the study. The meeting of the mayors prior to the PAC meeting and the newspaper report that a consensus had been reach was upsetting to Scott Haggerty. He expressed a strong opinion that these kinds of issues should be discussed and decided only in the current PAC meetings. Dublin Councilmember Kasie Hildenbrand said that she supported County Supervisor Scott Haggerty's opinion that this kind of discussion should be done in the PAC meetings. Both Mayor Lockhart and Mayor Kamena agreed to this. (continued..)

#### (6.0 Continued..)

Mayor Lockhart presented the motion to remove the Stoneridge Drive Extension and the West Las Positas Interchange from the Triangle Study Baseline Alternative. All except County Supervisor Scott Haggerty voted to pass the motion.

7.0 Selection of Operations Model: Jean Hart explained that the TAC had several different meetings to review the operating characteristics of various operations models. The TAC selected the traffic operations model, CORSIM for the current study since it fulfils the requirements of the study and would not increase the budget. Mayor Lockhart presented the motion to approve the recommendation of the TAC and was seconded by Dublin Councilmember Kaise Hildenbrand. The motion was passed

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unanimously.	
8.0 Adjournment: The meeting was adjourned until the next meeting on Friday, July 1, 2005.	

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# ALAMEDA COUNTY CONGESTION MANAGEMENT AGENCY

1333 BROADWAY, SUITE 220 • OAKLAND, CA 94612 • PHONE: (510) 836-2560 • FAX: (510) 836-2185 E-MAIL: mail@accma.ca.gov • WEB SITE: accma.ca.gov

## TRI-VALLEY TRIANGLE STUDY POLICY ADVISORY COMMITTEE JUNE 3, 2005

ROSTER OF MEETING ATTENDANCE REGIONAL MEETING ROOM, DUBLIN, CALIFORNIA

JURISDICTION/ **E-MAIL** PHONE # **ORGANIZATION** NAME 833-6650 CATRINS werman wermore 925-441-4502 wwwere 510.272.6691 Swar. HALGORY RACTOLOG ALAMODA COUN down.orgalo cacqui.or 925- 931-5653 ROB WILSON CITY OF PLEASANTON ٣١٠کنت PARSONS wereve 22.

## **Tri-Valley Highway Triangle Analysis**

## Revised Purpose of Analysis

The purpose of the Triangle Analysis is to develop, by consensus, a long range transportation plan for improvements on I-580, I-680 and Route 84 that benefits the region (Tri-Valley). The recommended project sequencing and implementation strategy will

- provide improvements to relieve congestion
- be cost effective
- be consistent with the transportation needs in the area

The analysis will consider project scope, schedule, cost, and funding availability.



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#### Memorandum

September 9, 2005 Agenda Item 6.0

**Date:** August 25, 2005

To: Triangle Policy Advisory Committee

From: Triangle Technical Advisory Committee

Jean Hart, Deputy Director

**Subject:** Alternative Packages of Improvements

## **Action Requested**

The TAC recommends that the Policy Advisory Committee approve the alternative packages as attached. The TAC reviewed data from "sensitivity" model runs to develop the packages considering connectivity, measures of effectiveness at a gross level, and a rough order of costs. Once approved by the Committee, the alternatives will be modeled, and evaluated using the approved quantitative and qualitative measures. It is assumed that some of the measures may be re-combined to simplify the presentation of the results as further analysis will be performed on the alternatives

## **Next Steps**

The seven packages will be coded into the traffic models to produce information on the measures of effectiveness previously approved by the PAC.

#### Discussion

Individual transportation improvements were subjected to "sensitivity" model runs to determine elicit information on the measures of effectiveness such as vehicle miles of travel by jurisdiction (diversion of traffic), vehicle hours traveled, vehicles hours of congestion, truck hours traveled and speed. The results were used to combine improvements into logical and meaningful sets of packages. The list of improvements was narrowed to the seven packages as shown in the attached graphics and described in the text. The Committee is requested to review and approve the packages.

Once approved, addition model runs (both forecast modeling and operational modeling) will be conducted. The packages will be evaluated based on the qualitative and quantitative measures of effectiveness approved by the PAC in May as follows:

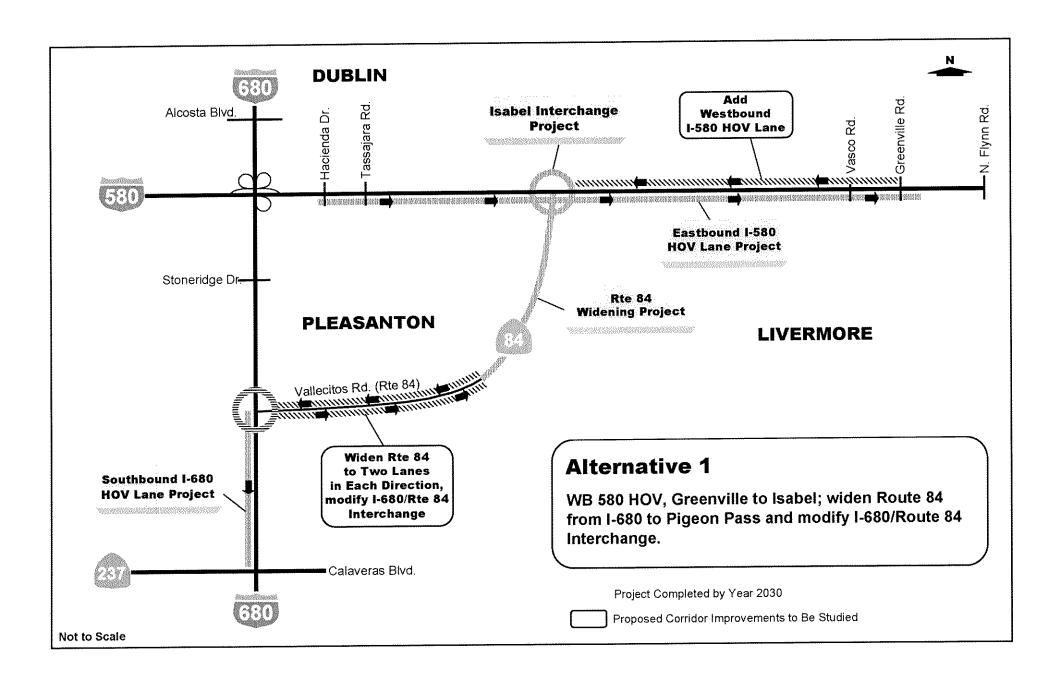
- 1) quantitative measures including vehicle hours of delay, vehicle miles of travel by jurisdiction and facility type, person hours of travel, average travel time, average speed and length of bottlenecks; and
- 2) qualitative measures including location of bottlenecks, project readiness, compatibility with other planned improvements and connectivity and access.

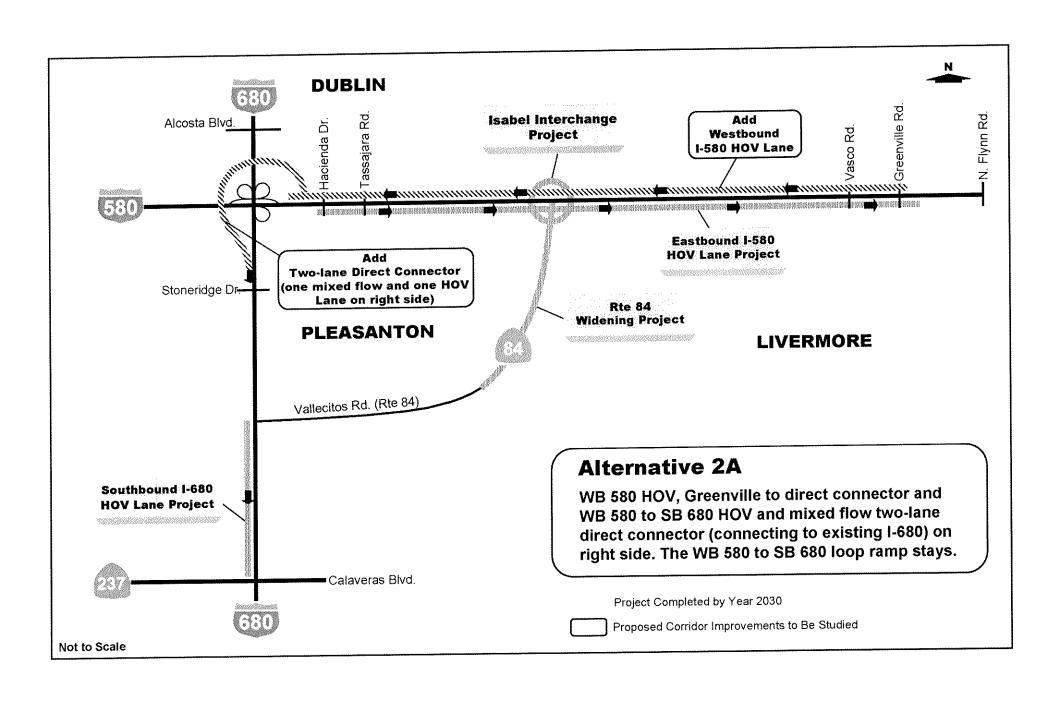
The Committee also approved weighting the quantitative measures 70% and qualitative measures 30%.

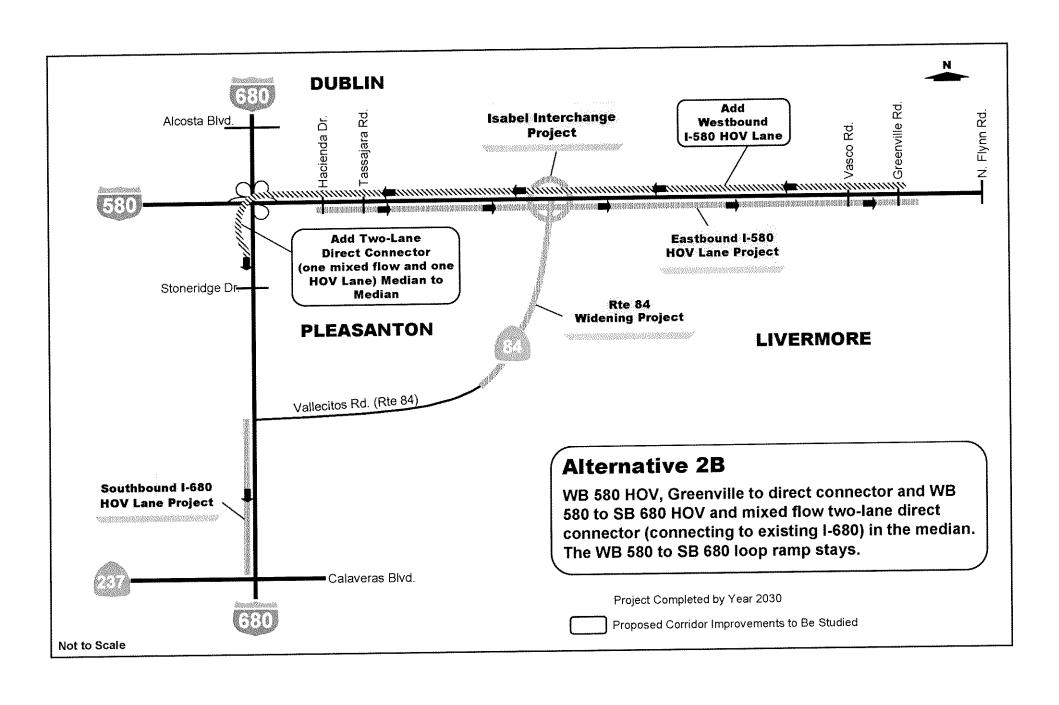
The evaluation may suggest that improvements from the packages be re-combined to formulate a new alternative. It is CMA staff's expectation that one iteration of alternatives will occur. The scope of work included evaluation of a total of eight improvement packages.

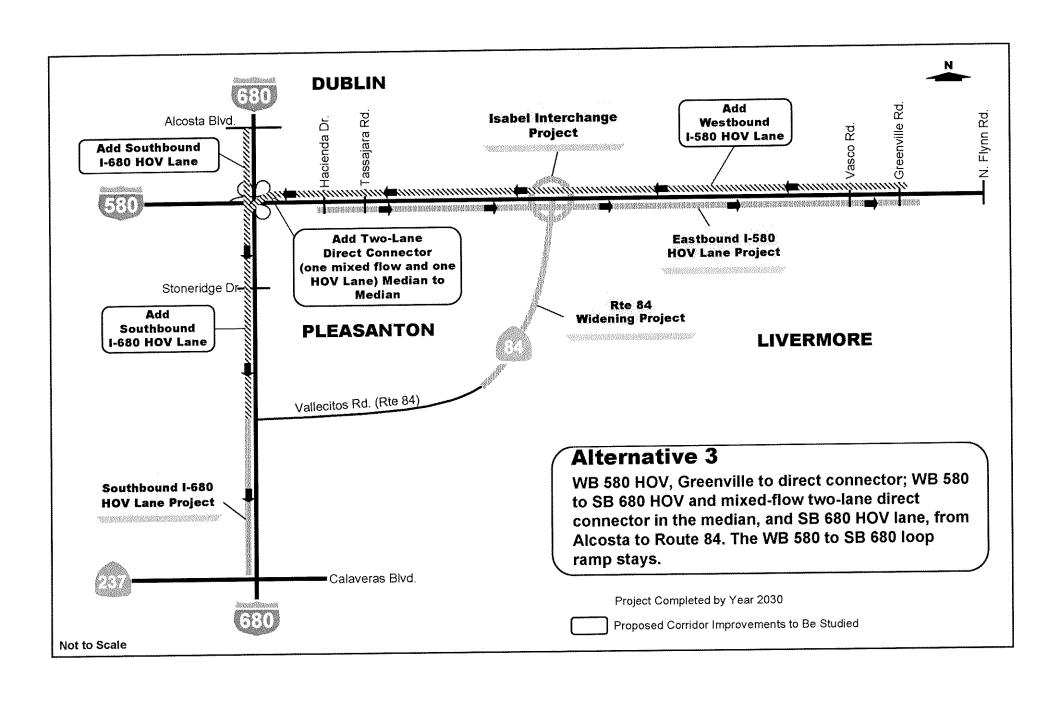
## Description of the Seven Alternative Packages for Triangle Study 8-23-05

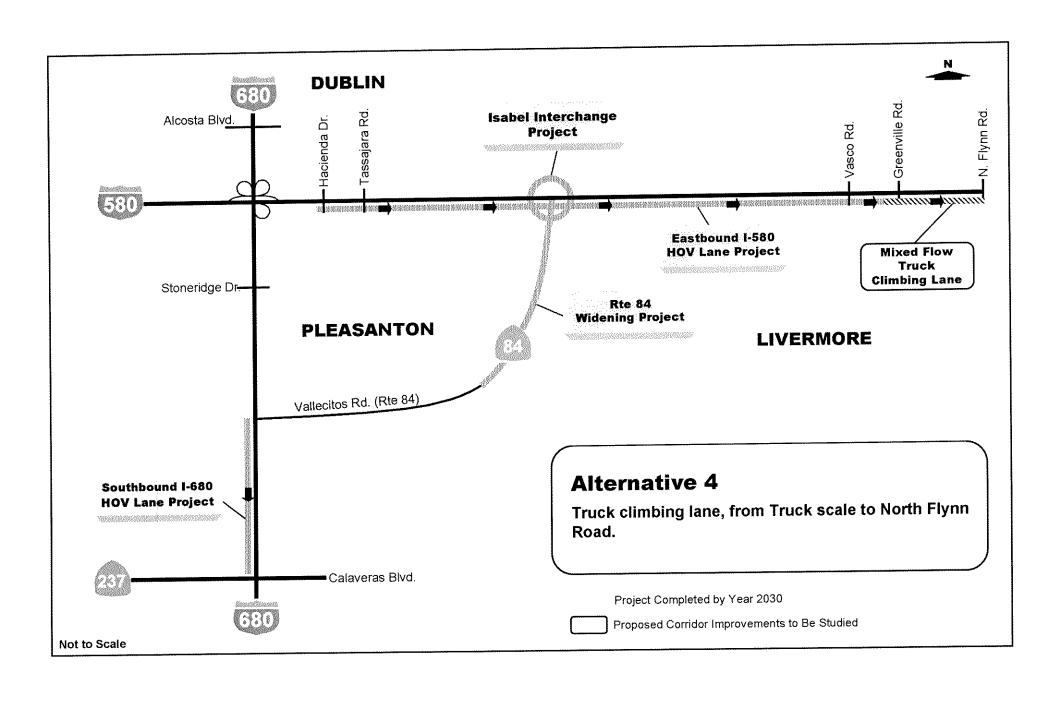
- 1. WB 580 HOV, Greenville to Isabel; widen Route 84 from I-680 to Pigeon Pass and modify I-680/Route 84 Interchange.
- 2A. WB 580 HOV, Greenville to direct connector; WB 580 to SB 680 HOV and mixed flow two-lane direct connector (connecting to existing I-680) on right side. The WB I-580 to SB I-680 loop ramp stays.
- 2B. WB 580 HOV, Greenville to direct connector; WB 580 to SB 680 HOV and mixed flow two-lane direct connector (connecting to existing I-680) in the median. The WB I-580 to SB I-680 loop ramp stays.
- 3. WB 580 HOV, Greenville to direct connector; WB 580 to SB 680 HOV and mixed-flow two-lane direct connector in the median, and SB 680 HOV lane, from Alcosta to Route 84. The WB I-580 to SB I-680 loop ramp stays.
- 4. Truck climbing lane, from Truck scale to North Flynn Road.
- 5. Widen Route 84 from I-680 to Pigeon Pass and modify Route 84 interchange; add mixed flow lane from Isabel to Vasco Road plus WB HOV lane from Greenville to Isabel.
- 6. NB 680 HOV lane, from Route 237 to the Alcosta Interchange; NB 680 to EB HOV direct connector in the median; and HOV lane from direct connector to the eastbound I-580 HOV lane that is in the Year 2030 Base Case.

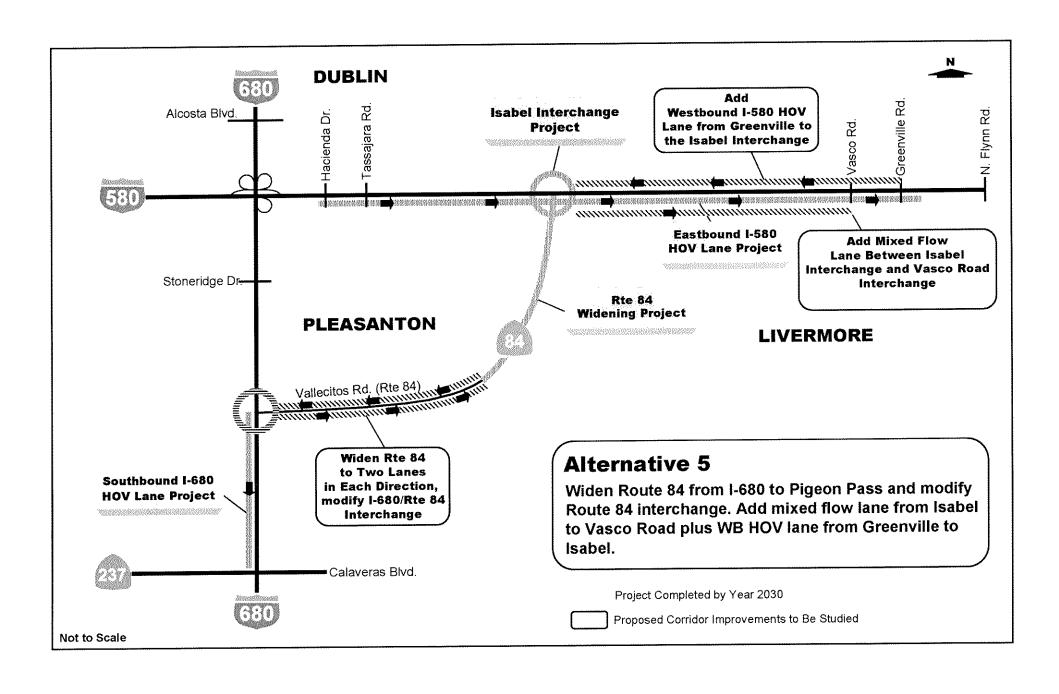


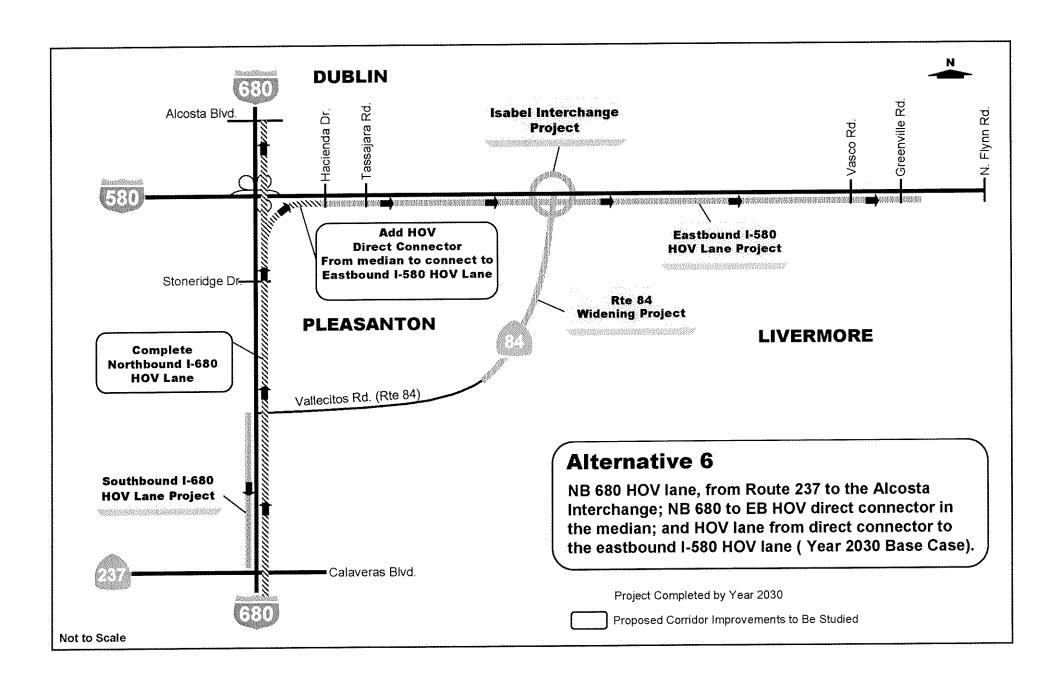












# Tri-Valley Highway "Triangle" Analysis Critical Schedule Milestones and Critical Decisions Point

Major Milestones	Dates	Proposed Changes	PAC/TAC - Critical Decisions/Actions	Impact on Schedule
PAC approved Scope of Work	Jan. 31, 2005		Completed	
Selection of Traffic Forecast Model	Jan. 31, 2005		Completed - Changed Scope to use CCTA Tri-Valley Travel Forecast Model	Delayed Schedule by three months
	June 3, 2005		Completed	Late decision impacts schedule
Selection of Traffic Operations Model  Approve Projects to be Tested	July 1, 2005	September 9, 2005	PAC Concurrence Required	Late decision impacts schedule
Approve Projects to be Tested  Approve Tri-Valley Vision for I-580, I- 680, and Route 84	Sept. 2, 2005	November 4, 2005	PAC Concurrence Required	Late decision impacts schedule
Approve Phasing and Implementation Strategy	Oct. 7, 2005	December 2, 2005	PAC Concurrence Required	Late decision impacts schedule
Approve Recommendations in Draft Report	Jan. 6, 2006	March 3, 2006	PAC Approval Required	Late decision impacts schedule
Approve Final Report	Feb. 3, 2006	April 7, 2006	PAC Approval Required	Late decision impacts schedule